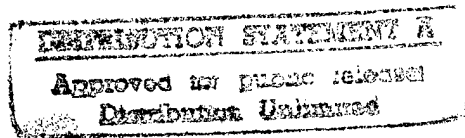


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Life After Cutbacks

Tracking California's Aerospace Workers

Contrary to popular belief, workers in California's aerospace industry weathered the defense budget reductions of the late 1980s and early 1990s in no worse shape than their nonaerospace durable manufacturing counterparts in the state. Both sectors experienced sharp business downturns and drops in employment, and workers in both endured this period—one of the most severe recessions in California history—in similar ways.

Aerospace industry workers' employment histories during the period differed little from those of other durable goods manufacturing workers in the state. They were earning more than nonaerospace durable goods manufacturing workers in 1989, and the difference held through 1994.

These are the findings of a recent RAND study of defense downsizing's effects on California's aerospace industry workers. Performed by RAND's National Defense Research Institute, the study looked at aerospace workers in California between 1989 and 1994 to gauge whether they suffered disproportionate hardships during recent defense budget downturns.

This study examined the experience of all aerospace workers employed in California in 1989—517,000 individuals—and followed their employment history through 1994. The study compared that group with the work histories of 315,000 individuals employed in nonaerospace durable goods manufacturing operations in the state.

In a nutshell, between 1989 and the end of 1994,

- aerospace workers and other durable goods manufacturing employees exited the California work force at about the same pace
- aerospace employees who lost jobs were out of work for roughly the same amount of time as their nonaerospace durable goods manufacturing counterparts

- once they found new employment, workers from both industry groups reentered the state's work force in the same proportions
- 1989's aerospace worker group earned higher wages than nonaerospace durable goods manufacturing industry workers through 1994 and their real wages rose during the period by an average of 5 percent versus 3 percent for their nonaerospace contemporaries.

CALIFORNIA CONTRACTIONS IN CONTEXT

The end of the Cold War brought profound changes to the U.S. military and to sectors of the civilian economy that have been linked closely to the armed services. The new political and economic environment of the 1990s is defined by leaner Pentagon budgets, fewer uniformed personnel, and growing closure lists of bases, shipyards, and other facilities.

The aerospace industry has been at the center of these contractions. As the Pentagon's budgets and employment levels shrank, its need for sophisticated aerospace products dropped. And for some companies heavily dependent on defense business, minor changes in Pentagon budget outlays translated into major dislocations on the factory floor. Nationwide, the aerospace industry's job base has decreased 30 percent since 1987.

Nowhere have those changes been more apparent than in California and the Los Angeles basin. At the peak of aerospace employment in 1987, the state was home to one in four U.S. aerospace jobs. In Los Angeles County alone, aerospace jobs accounted for 10 percent of the national total.

Since then, the aerospace industry in California has become a shadow of its former self. The state's aerospace employment rolls are down 33 percent compared with 1987, while in Los Angeles County the industry's job base is only 50 percent of its size eight years ago.

Aerospace was not the only sector that fell on hard times during the late 1980s and early 1990s. California's nonaerospace durable goods manufacturing industries also contracted during the recession, seeing employment fall from 974,000 in 1989 to 803,000 in 1994.

GOVERNMENT ASSISTANCE PROGRAMS

The federal government responded to this industry downturn by setting up programs to assist aerospace workers. While different in scope and focus, all of these programs were based on a common assumption that aerospace workers and employees of other industries dependent on defense contracts suffered unique hardships.

This study tested that broad assumption. It tried to define in quantitative terms aerospace workers' employment experience during the downturn, explore whether that experience differed from that of workers in comparable nonaerospace manufacturing operations, and identify worker groups most affected by the downturn.

RAND'S UNIQUE DATA

RAND researchers created a unique data base using statistics drawn from wage files and unemployment income files provided by California's Employment Development Department. These statistics allowed researchers to track wage, employment, and demographic characteristics of *each individual aerospace worker* who was employed in California in 1989, a group that totaled 517,000 individuals. This statistical resource also allowed researchers to assemble the same data for some 315,000 people who were employed in similar durable goods manufacturing jobs in nonaerospace industries in California. The state's database did not reveal the identities of individual employees, but it nevertheless allowed RAND to follow these two sets of workers for six years. This study period corresponds to the time that the state suffered the brunt of the defense downturn and had not yet received benefits from the new federal assistance programs.

AEROSPACE WORKERS WERE NOT UNIQUELY DISADVANTAGED

The study found that

- on average, 1989 aerospace workers who were employed in any industry at the end of 1994 were

earning slightly higher inflation-adjusted wages than they did before the defense downturn

- aerospace workers in 1989 were earning wages 10 to 15 percent higher than nonaerospace durable goods manufacturing employees with similar age and education, and that wage difference held through 1994
- aerospace workers were slightly less likely to use unemployment insurance; however, aerospace workers who drew benefits were on the system one to three weeks longer, on average, than nonaerospace workers.

Among the 1989 California aerospace workers still working six years later, two-thirds remained employed in the industry in 1994. Another nine percent of these workers had moved to other manufacturing jobs in non-aerospace industries. Wages for these two groups of workers, who constituted the vast majority of the study's initial study pool of aerospace employees who were working in 1994, grew an average of 5 percent during the period.

Another 14 percent of 1989 California aerospace workers who were employed in 1994 had moved to service industry jobs. These workers' wages dropped more than did wages of other durable goods manufacturing workers who moved into service jobs (a 17 percent drop versus a 12 percent drop). But even with that larger wage drop, the former aerospace employees—perhaps because they tended to be older and better-educated—earned more than former manufacturing workers who made similar switches into the service sector.

Even though aerospace workers endured the defense budget downturn in better shape than popular press reports have suggested, a significant share experienced turbulence in the labor market. One-fourth of the 1989 pool of aerospace workers who were employed at the end of 1994 saw their wages fall 15 percent or more during the period. In addition, some aerospace workers experienced long periods of unemployment. In most cases, however, labor market turbulence was no greater for aerospace workers than for workers who were employed in other durable goods manufacturing sectors.

RAND research briefs summarize research that has been more fully documented elsewhere. This research brief describes work done for the National Defense Research Institute; it is documented in Life After Cutbacks: Tracking California's Aerospace Workers, by Robert F. Schoeni, Michael Dardia, Kevin F. McCarthy, Georges Vernez, MR-688-OSD, 1996, 72 pp., \$15.00, ISBN: 0-8330-2356-X, available from RAND Distribution Services (Telephone: 310-451-7002; FAX: 310-451-6915; or Internet: order@rand.org). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by National Book Network. RAND is a nonprofit institution that helps improve public policy through research and analysis; its publications do not necessarily reflect the opinions or policies of its research sponsors.

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1700 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138 • Telephone 310-393-0411 • FAX 310-393-4818
2100 M St., N.W., Washington, D.C. 20037-1270 • Telephone 202-296-5000 • FAX 202-296-7960